

ITB Students Won Special Prize in British Council E-Idea Competition

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Alfadho Khasroh (alumnus of System and Information Technology 2007), Kavin Yudhitia (Telecommunication Engineering 2008), Mitha Pratiwi (Environmental Engineering 2007), and Emmy Ulfah (Architecture 2007) managed to get a special prize "Inspirational Idea" in the competition held by British Council and LRQA, with their idea "Text-based Intelligent Industrial System as Implementation of Green Industry Concept in Electric Energy Efficiency Efforts". They said that Indonesia's industrial sector absorbed 70% of national electricity consumption to feed large machines, electronic devices, and hundreds of thousands of light bulbs burning 24 hours a day. With the control that was more convenient and cheaper using text messaging service, it's expected that approximately 44000 industries registered in Indonesia could make savings up to 80% of their electricity usage that now cost collectively 116 billion rupiahs. By saying that way, those industries were indirectly have applied the concept of environmentally friendly because until now the generation of electrical energy in Indonesia was still dominated by fossil fuels that emitted huge number of carbon dioxide and contributed much to the global warming.

"The Technology was conceived firstly by my friend Kavin Yudhitia from Telecommunication Engineering, At first he tried to create program that could control LED on the board via SMS. Then i asked his permission to develop that system on all electrical equipment, especially in large building for industrial scale, " Said Alfa-Alfadho nickname- to Kompas.

He uses C# programming language to create server that can receive the command in the form of short texting message from cellular phone, that transfer the command to computer via Modem or Bluetooth. From Computer, the command is passed to the microcontroller which is the connector between computer and existing power lines in the building. In a short words, All the electrical devices in the industry will on or off based on the command sent via short text message.

Besides for Industry to be more efficient in using the electricity, Alfa also said that this technology could also be utilized for PLN to cut off the electricity for the customers in arrears for long time. "it's better for PLN because if it has to cut off the electricity panel, the cost for the re-installation will be so expensive. With the technology which i develop, PLN can cut off the customer's electrical grid without damaging the existing electrical grid," explained him to Kompas.

In the near future, Alfa wants to develop this technology not only with the text-messaging but also mobile application in cellular phone. "But we still need more research and development," said Alfa that is currently working at Medco Energy.

Alfa along with three other winners from Indonesia will meet the winners of other E-Idea from different countries like Australia, China, Japan, Korea, Thailand, and Vietnam. Their works will be exhibited by the British Council on Wednesday (05/10/11) at the Shangri-La Hotel, Jakarta.